

Message

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**From:** Strynar, Mark [/O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=5A9910D5B38E471497BD875FD329A20A-STRYNAR, MARK]  
**Sent:** 5/10/2018 12:26:39 PM  
**To:** Offenberg, John [Offenberg.John@epa.gov]; DeMarini, David [DeMarini.David@epa.gov]  
**CC:** Riedel, Theran [Riedel.Theran@epa.gov]; Lindstrom, Andrew [Lindstrom.Andrew@epa.gov]  
**Subject:** RE: Test mutagenicity of HFP, HFPO and GenX ???

GenX as the free acid (HFPO-DA) is also liquid at room temp. If that is an issue I think we can get the ammonium salt from Tamara Tal or Sue Fenton.

Mark

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**From:** Offenberg, John  
**Sent:** Thursday, May 10, 2018 8:23 AM  
**To:** DeMarini, David <DeMarini.David@epa.gov>  
**Cc:** Riedel, Theran <Riedel.Theran@epa.gov>; Lindstrom, Andrew <Lindstrom.Andrew@epa.gov>; Strynar, Mark <Strynar.Mark@epa.gov>  
**Subject:** Test mutagenicity of HFP, HFPO and GenX ???

David,

The only other thought is that all things PFAS are QA level 1, which means that in addition to QAPPs, IRP, etc., it will be audited. Just a reminder that there will be fine toothed combs involved. No reason to prevent us from doing this. I agree that if no such data is available then it is an opportunity that we should seriously consider.

John

HFP and HFPO are liquids under pressure at standard temperature and pressure. I'm not certain about GenX. Mark???

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**From:** DeMarini, David  
**Sent:** Wednesday, May 9, 2018 1:49 PM  
**To:** Offenberg, John <Offenberg.John@epa.gov>  
**Subject:** RE: Proposals for Additional FY2018 Resources (due to OPARM by noon, Thursday, May 10)

John:

We really should test all these things for mutagenicity; there aren't any mutagenicity papers at all on these. I discussed it with Theran just now, and I suggested that you and he (and Strynar/Lindstrom) discuss all this. My name is in Ian Gilmour's IRP and in Mike Lewandowski's QAPP to look at the mutagenicity of VOCs etc. So, assuming these are gases, the work could be covered under those documents. I would have to ask formal permission from my management, but otherwise, the paper approval mechanism is in place.

Let me know what you guys think. We could have a meeting to discuss it further, but I would be very interested to test these—with and without UV light/NOx.

David

David M. DeMarini, Ph.D.  
Genetic Toxicologist

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Dr. David M. DeMarini  
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**Courier Address (Fed Ex., UPS, etc.) for CHEMICALS/SAMPLES**

Dr. David M. DeMarini  
Chemical Services A-184  
US EPA  
109 T.W. Alexander Drive  
RTP, NC 27709, USA

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**From:** Offenberg, John  
**Sent:** Wednesday, May 09, 2018 1:21 PM  
**To:** DeMarini, David <[DeMarini.David@epa.gov](mailto:DeMarini.David@epa.gov)>  
**Subject:** RE: Proposals for Additional FY2018 Resources (due to OPARM by noon, Thursday, May 10)

David,

To round out the trio, gram quantities of GenX (HFPO-dimer) are also here in house, with Mark Strynar (NERL/EMMD).

John

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**From:** DeMarini, David  
**Sent:** Wednesday, May 9, 2018 12:47 PM  
**To:** Offenberg, John <[Offenberg.John@epa.gov](mailto:Offenberg.John@epa.gov)>  
**Subject:** RE: Proposals for Additional FY2018 Resources (due to OPARM by noon, Thursday, May 10)

John:

Interesting—no papers on the mutagenicity of either HFPO or HFP, let alone GenX. Hmmmmm. I would have to have a QAPP in place to do anything on these. I am sure that DuPont has tested these but not published the results. I'll discuss it with my management and see what I might be allowed to do.

David

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**From:** Offenberg, John

**Sent:** Wednesday, May 09, 2018 12:39 PM

**To:** DeMarini, David <[DeMarini.David@epa.gov](mailto:DeMarini.David@epa.gov)>

**Subject:** RE: Proposals for Additional FY2018 Resources (due to OPARM by noon, Thursday, May 10)

David,

If you're interested... Theran and I recently received a 1 kg bottle of hexafluoropropylene oxide - HFPO - the GenX monomer, and should be receiving 20 lbs of the precursor, Hexafluoro propylene – HFP in a few weeks. I believe Andy Lindstrom may have GenX, though maybe not so much of it.

John

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**From:** DeMarini, David

**Sent:** Wednesday, May 9, 2018 12:35 PM

**To:** Offenberg, John <[Offenberg.John@epa.gov](mailto:Offenberg.John@epa.gov)>

**Subject:** RE: Proposals for Additional FY2018 Resources (due to OPARM by noon, Thursday, May 10)

Hi John:

Thanks; I just read through it, and I talked with my Division Director, Tim Shafer. Anyway, as I noted earlier, these perfluorinated compounds really aren't mutagenic, and although there are a few studies in rats/mice showing carcinogenicity, they all show liver cancer resulting from very high doses. The general assessment for human health is unclear at this point. They are developmental toxins, which is why Chris Lau has been copied on this effort. But there isn't much for me to do that hasn't been done already—and shown negative effects with regard to mutagenicity. The starting compounds, things with double bonds and epoxides, would all be mutagenic and carcinogenic, of course, but not so likely for the polymers. I saw that there were studies with lead and other things, but again, my colleagues, like David Thomas here, are doing key work on lead already.

Tim told me that upper management looked at all this and made their decisions about what/who could submit proposals, and I was not included for the obvious reason that these compounds just aren't mutagenic. One thing I have vaguely discussed with Mark Strynar is getting XAD/ethyl acetate extracts of river waters from him (like from Cape Fear) and testing those organic extracts for mutagenicity. That would be interesting to see. I might still have that conversation with him to see if he would have samples to spare going forward—either he or Andy Lindsrom.

Anyway, for now, I am out of the loop on this, which is perhaps fine Ex. 6 Personal Privacy (PP) and taking on much more at this relatively late date, will be problematic for me. (Hard to figure out how to bring a 45-year research effort to a close!)

Thanks for alerting me to this. Hopefully something useful will come of it all.

David

David M. DeMarini, Ph.D.

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Dr. David M. DeMarini  
Chemical Services A-184  
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RTP, NC 27709, USA

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**From:** Offenberg, John  
**Sent:** Wednesday, May 09, 2018 11:16 AM  
**To:** DeMarini, David <[DeMarini.David@epa.gov](mailto:DeMarini.David@epa.gov)>  
**Subject:** FW: Proposals for Additional FY2018 Resources (due to OPARM by noon, Thursday, May 10)

This is the earliest mention of Shark Tank" Proposals I could find. I was out most of last week and only came into this process late. See info at very bottom.

John

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**From:** Buckley, Timothy  
**Sent:** Tuesday, May 1, 2018 1:38 PM  
**To:** Lindstrom, Andrew <[Lindstrom.Andrew@epa.gov](mailto:Lindstrom.Andrew@epa.gov)>; Pilant, Drew <[Pilant.Drew@epa.gov](mailto:Pilant.Drew@epa.gov)>; Neale, Anne <[Neale.Anne@epa.gov](mailto:Neale.Anne@epa.gov)>; Giri, Chandra <[Giri.Chandra@epa.gov](mailto:Giri.Chandra@epa.gov)>; Offenberg, John <[Offenberg.John@epa.gov](mailto:Offenberg.John@epa.gov)>; Ryan, Jeff <[Ryan.Jeff@epa.gov](mailto:Ryan.Jeff@epa.gov)>; Merrill, Raymond <[Merrill.Raymond@epa.gov](mailto:Merrill.Raymond@epa.gov)>; Pye, Havalá <[Pye.Havala@epa.gov](mailto:Pye.Havala@epa.gov)>; Alapaty, Kiran <[Alapaty.Kiran@epa.gov](mailto:Alapaty.Kiran@epa.gov)>; Egeghy, Peter <[Egeghy.Peter@epa.gov](mailto:Egeghy.Peter@epa.gov)>; Zartarian, Valerie <[Zartarian.Valerie@epa.gov](mailto:Zartarian.Valerie@epa.gov)>; Strynar, Mark <[Strynar.Mark@epa.gov](mailto:Strynar.Mark@epa.gov)>; Wetmore, Barbara <[wetmore.barbara@epa.gov](mailto:wetmore.barbara@epa.gov)>; Lau, Chris <[Lau.Christopher@epa.gov](mailto:Lau.Christopher@epa.gov)>; Richard, Ann <[Richard.Ann@epa.gov](mailto:Richard.Ann@epa.gov)>; Riedel, Theran <[Riedel.Theran@epa.gov](mailto:Riedel.Theran@epa.gov)>; Medina-Vera, Myriam <[Medina-Vera.Myriam@epa.gov](mailto:Medina-Vera.Myriam@epa.gov)>; Washington, John <[Washington.John@epa.gov](mailto:Washington.John@epa.gov)>  
**Cc:** Garland, Jay <[Garland.Jay@epa.gov](mailto:Garland.Jay@epa.gov)>; Hubal, Elaine <[Hubal.Elaine@epa.gov](mailto:Hubal.Elaine@epa.gov)>; Guiseppi-Elie, Annette <[Guiseppi-Elie.Annette@epa.gov](mailto:Guiseppi-Elie.Annette@epa.gov)>; Gillespie, Andrew <[Gillespie.Andrew@epa.gov](mailto:Gillespie.Andrew@epa.gov)>; Watkins, Tim <[Watkins.Tim@epa.gov](mailto:Watkins.Tim@epa.gov)>; Kenneke, John <[Kenneke.John@epa.gov](mailto:Kenneke.John@epa.gov)>; Grimm, Ann <[Grimm.Ann@epa.gov](mailto:Grimm.Ann@epa.gov)>; Cashdollar, Jennifer <[Cashdollar.Jennifer@epa.gov](mailto:Cashdollar.Jennifer@epa.gov)>; Kaushik, Surender <[Kaushik.Surender@epa.gov](mailto:Kaushik.Surender@epa.gov)>; Biales, Adam <[Biales.Adam@epa.gov](mailto:Biales.Adam@epa.gov)>; Oshima, Kevin <[Oshima.Kevin@epa.gov](mailto:Oshima.Kevin@epa.gov)>; Schumacher, Brian <[Schumacher.Brian@epa.gov](mailto:Schumacher.Brian@epa.gov)>; Stroup, Gene <[Stroup.Gene@epa.gov](mailto:Stroup.Gene@epa.gov)>; Hagler, Gayle <[Hagler.Gayle@epa.gov](mailto:Hagler.Gayle@epa.gov)>; Behymer, Thomas <[Behymer.Thomas@epa.gov](mailto:Behymer.Thomas@epa.gov)>  
**Subject:** FW: Proposals for Additional FY2018 Resources (due to OPARM by noon, Thursday, May 10)

See email string below regarding availability of \$10M in FY18 funding for strategic research efforts. Shark tank proposals are due to OPARM by noon Thursday 10 May. I suggest the following initiatives related to PFAS. I am also attaching the latest version of the NERL PFAS Strategic Research Plan to support the development of these initiatives. As you contemplate this, keep in mind that funds will need to be spent quickly once received.

# Ex. 5 Deliberative Process (DP)

Tim

Timothy J. Buckley, PhD  
Director of the Exposure Methods & Measurements Division  
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109 TW Alexander Drive  
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Email: [buckley.timothy@epa.gov](mailto:buckley.timothy@epa.gov)  
URL: <http://www.epa.gov/heasd/staff/buckley.html>  
Phone: (919) 541-2454 (O); FAX: -0239  

Ex. 6 Personal Privacy (PP) (C)

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**From:** Watkins, Tim

**Sent:** Tuesday, May 01, 2018 7:54 AM

**To:** Garland, Jay <[Garland.Jay@epa.gov](mailto:Garland.Jay@epa.gov)>; Morgan, Ardra <[Morgan.Ardra@epa.gov](mailto:Morgan.Ardra@epa.gov)>; Buckley, Timothy <[Buckley.Timothy@epa.gov](mailto:Buckley.Timothy@epa.gov)>; Behymer, Thomas <[Behymer.Thomas@epa.gov](mailto:Behymer.Thomas@epa.gov)>; Gonzalez, Daniel <[Gonzalez.Daniel@epa.gov](mailto:Gonzalez.Daniel@epa.gov)>; Hubal, Elaine <[Hubal.Elaine@epa.gov](mailto:Hubal.Elaine@epa.gov)>; Brunson, Gerald <[Brunson.Gerald@epa.gov](mailto:Brunson.Gerald@epa.gov)>; Gillespie, Andrew <[Gillespie.Andrew@epa.gov](mailto:Gillespie.Andrew@epa.gov)>; Guiseppi-Elie, Annette <[Guiseppi-Elie.Annette@epa.gov](mailto:Guiseppi-Elie.Annette@epa.gov)>; Stroup, Gene <[Stroup.Gene@epa.gov](mailto:Stroup.Gene@epa.gov)>; Cashdollar, Jennifer <[Cashdollar.Jennifer@epa.gov](mailto:Cashdollar.Jennifer@epa.gov)>; Grimm, Ann <[Grimm.Ann@epa.gov](mailto:Grimm.Ann@epa.gov)>; Kryak, DavidD <[Kryak.Davidd@epa.gov](mailto:Kryak.Davidd@epa.gov)>; Kenneke, John <[Kenneke.John@epa.gov](mailto:Kenneke.John@epa.gov)>; Hagler, Gayle <[Hagler.Gayle@epa.gov](mailto:Hagler.Gayle@epa.gov)>; Schumacher, Brian <[Schumacher.Brian@epa.gov](mailto:Schumacher.Brian@epa.gov)>; Alapaty, Kiran <[Alapaty.Kiran@epa.gov](mailto:Alapaty.Kiran@epa.gov)>; Pierce, Tom <[Pierce.Tom@epa.gov](mailto:Pierce.Tom@epa.gov)>; Oshima, Kevin <[Oshima.Kevin@epa.gov](mailto:Oshima.Kevin@epa.gov)>

**Subject:** RE: Proposals for Additional FY2018 Resources (due to OPARM by noon, Thursday, May 10)

Just following-up on the email below to get some thoughts flowing about potential proposals. Also, expanding the distribution list to include NERL MIs and NERL ADs for Science. Below are a few potential proposals to consider by NPD program, some of which we have already discussed and some of which are rough ideas.

# Ex. 5 Deliberative Process (DP)

## Ex. 5 Deliberative Process (DP)

You may have other ideas, which is great. I just wanted to get some ideas out there. Feel free to reach out to staff in your organization to discuss and let me know if you have any questions.

Thanks.

Tim Watkins  
Director  
National Exposure Research Laboratory  
Office of Research and Development  
US EPA  
(919) 541-5114  
[Watkins.tim@epa.gov](mailto:Watkins.tim@epa.gov)

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**From:** Watkins, Tim  
**Sent:** Monday, April 30, 2018 9:48 AM  
**To:** Garland, Jay <[Garland.Jay@epa.gov](mailto:Garland.Jay@epa.gov)>; Morgan, Ardra <[Morgan.Ardra@epa.gov](mailto:Morgan.Ardra@epa.gov)>; Buckley, Timothy <[Buckley.Timothy@epa.gov](mailto:Buckley.Timothy@epa.gov)>; Behymer, Thomas <[Behymer.Thomas@epa.gov](mailto:Behymer.Thomas@epa.gov)>; Gonzalez, Daniel <[Gonzalez.Daniel@epa.gov](mailto:Gonzalez.Daniel@epa.gov)>; Hubal, Elaine <[Hubal.Elaine@epa.gov](mailto:Hubal.Elaine@epa.gov)>; Brunson, Gerald <[Brunson.Gerald@epa.gov](mailto:Brunson.Gerald@epa.gov)>; Gillespie, Andrew <[Gillespie.Andrew@epa.gov](mailto:Gillespie.Andrew@epa.gov)>; Guiseppi-Elie, Annette <[Guiseppi-Elie.Annette@epa.gov](mailto:Guiseppi-Elie.Annette@epa.gov)>; Stroup, Gene <[Stroup.Gene@epa.gov](mailto:Stroup.Gene@epa.gov)>  
**Subject:** Fwd: Proposals for Additional FY2018 Resources (due to OPARM by noon, Thursday, May 10)

FYI - For discussion at staff meeting.

Sent from my iPhone

Begin forwarded message:

**From:** "Burman, Eric" <[Burman.Eric@epa.gov](mailto:Burman.Eric@epa.gov)>  
**Date:** April 27, 2018 at 10:05:43 AM EDT  
**To:** ORD-Exec-Council-Directors <[Execcouncildirectors@epa.gov](mailto:Execcouncildirectors@epa.gov)>  
**Cc:** ORD-Mgmt-Council <[ORDMgmtCouncil@epa.gov](mailto:ORDMgmtCouncil@epa.gov)>  
**Subject:** Proposals for Additional FY2018 Resources (due to OPARM by noon, Thursday, May 10)

EC Members,

As discussed in the April 19<sup>th</sup> EC meeting, ORD has \$10 million in additional FY2018 planning resources to fund additional projects. We agreed to use a "Shark Tank" approach for selecting the projects to be funded. NPDs and LCOs are encouraged to work together to develop and submit up to four proposals for each NPD. LCOs may also submit proposals directly, provided they have consulted with and have NPD support. Proposals must address high priority agency needs (e.g. PFAS, TSCA, Lead Water Infrastructure), be unfunded or underfunded in FY18, and have an available funding vehicle by which the funds can be put to use. Among other details, proposals should also identify the problem being solved, the customer, and how the output or product meets the customer's needs. To ensure consistency in the discussion and evaluation of the proposals, please use the attached template to submit your proposals. They are due to OPARM (Stefan Silzer and Deborah Heckman) by noon on Thursday, May 10. Thank you,

Eric Burman, Acting Senior Budget Officer  
Office of Program Accountability and Resource Management  
USEPA/Office of Research & Development

Phone: 202-564-0267

Cell: Ex. 6 Personal Privacy (PP)